

Claims 1,3,4,5,6,7,8 and 9 are pending.

Claim 1 is directed to a process that entails treating water with ozone. The water is waste water, resulting from for example the production of polycarbonate, containing Total Organic Carbon (TOC) in amount greater than 2 ppm, carbonic acid or carbonate in amount of at least 0.1% and salt in amount of 2 to 20%. The process results in a salt solution from which chlorine and sodium hydroxide may be extracted by electrolysis. The ozone treatment of the waste water (hereinafter "ozonation") is characterized in terms of the pH, time, pressure and temperature.

Claim 3, the only other independent claim is directed to a process for the production of chlorine.

Claims 1 and 3-9 stand rejected under 35 U.S.C. 103 (a) as being unpatentable over Shigeniwa et al in view of Bennett, both of record.

Based on its abstract and English language machine-translation, Shigeniwa is considered to disclose a process for treating tap water with ozone for the purpose of removing musty-odor. Nothing in the document refers to the presence of salt at the presently recited level of 2 to 20 wt%.

Bennett disclosed removing iron and manganese impurities from sea water, the process entailing pre-treating of the saline solutions with sodium hypochlorite solutions.

It is not clear and the Examiner failed to explain how or why these documents may at all be combined, much less for the purpose of denying patentability to the pending claims.

The law requires a motivating reason to combine the elements. The relevant inquiry is not whether the several elements of the claimed invention existed in the prior art, but whether the art made obvious the invention as a whole. An essential

factor in structuring a valid rejection sounding in obviousness is the incentive to combine. See W.L.Gore & Associates, Inc. v. Garlock, Inc. 6 USPQ2d 1277 Fed. Cir. 1988).

Here, not only is salt in an amount of 2-20 wt%, a key element, missing from the cited art, there is no direction or guidelines as to how or why the disclosed elements may be combined.

The cited art cannot reasonably be taken as suggesting the embodiment of Claim 3. This embodiment, which is directed to a process for the production of chlorine by electrolysis of salt, is not disclosed or suggested by the documents. Nor can Claim 4 that is directed to electrolysis by the membrane process.

Claims 8 and 9 that refer to the process for the production of chlorine recite further limitations none of which is disclosed by the cited art.

Furthermore, Claim 5 that depends from Claim 1 requires the water to be the waste water from the production of polycarbonate by a stated process. Nothing in the cited art discloses this limitation.

Reconsideration of the rejection and its retraction are requested.

In Re McLaughlin 170 USPQ 209 cited in support of hindsight reasoning as basis for rejection under section 103 has been reviewed and its inapplicability to the present circumstances is noted.


McLaughlin's claim was directed to an improved car-loading construction for use in railway cars. The rejection was based on Cook in view of Robertson and Aquino or of Lundvall. The McLaughlin court noted that each of the secondary references show that it was well known to use side filler panels and bulkheads to confine pelletized loads to prevent shifting, these references would have suggested the use of such panels and bulkheads with the primary (Cook) car for the same

purpose. The commonality of subject matter in the secondary references with each other and with the primary reference made proper the rejection.

The necessary commonality of subject matter is not shared by the documents cited in the present prosecution. McLaughlin is respectfully submitted to have no present relevance.

Believing the above represent a complete response to the Office Action and that the application is in condition for allowance, applicants request the earliest issuance of an indication to this effect.

Respectfully submitted,

By  _____
Aron Preis
Attorney for Applicants
Reg. No. 29,426

Bayer MaterialScience LLC
100 Bayer Road
Pittsburgh, Pennsylvania 15205-9741
(412) 777-3814
FACSIMILE PHONE NUMBER:
(412) 777-3902
jdg/preis/ap015